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Beam Hopping Self Addressed Packet Switched  
Communication System with Power Gating

ABSTRACT OF THE DISCLOSURE

A downlink beam frame signal processing system  
5 (100) for a communication satellite includes a packet  
switch (608) that routes self addressed uplink data to  
a memory (804). The memory (804) stores queues for at  
least a first and a second downlink beam hop locations  
(302, 304). The processing system (100) also includes  
10 a power amplifier (108) that amplifies a waveform  
formed using the uplink data. A power gating circuit  
(1200) coupled to the power amplifier (108) includes a  
power gate input (1216) responsive to a power gating  
signal to remove RF power from at least a portion of  
15 the waveform before transmission.